

<u>SUBJECT</u>		<u>DATE</u>
1056. Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	APR 23, 2015
1057. Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE	APR 30, 2015
1058. Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE	MAY 7, 2015
1059. Decharacterized Wastes, <90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE	MAY 14, 2015
1060. Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE	MAY 21, 2015
1061. Hazardous Debris Macroencapsulation and Size Reduction	ENCORE	MAY 28, 2015
1062. Universal Waste Lamps and Prohibition on Crushing		JUN 4, 2015
1063. F003 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 11, 2015
1064. F001 - F005 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 18, 2015
1065. Macroencapsulation of Hazardous Debris and Presence of Free Liquids	ENCORE	JUN 25, 2015
1066. DOT Shipping of Damaged, Defective or Recalled Lithium Batteries		JUL 1, 2015
1067. Used Oil Eligibility for Animal and Vegetable Oils	ENCORE	JUL 9, 2015
1068. Used Oil Eligibility for Petroleum Oils Mixed with Animal or Vegetable Oils		JUL 16, 2015
1069. Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction/Destruction	ENCORE	JUL 23, 2015
1070. Conditioned Exclusion for Characteristic Debris Treated via Immobilization		JUL 30, 2015
1071. RCRA Personnel Training and Classroom Training vs. Online Training		AUG 6, 2015
1072. PCB Decontamination Standards with No Decontamination Performed		AUG 13, 2015
1073. PCB Manifest Exceptions a.k.a. When is a PCB Manifest Not Required	ENCORE	AUG 19, 2015
1074. PCB Manifest Relief a.k.a. When is a PCB Manifest Not Required – The Sequel		AUG 27, 2015
1075. Hazardous Debris and Radioactively Contaminated Cadmium Batteries	ENCORE	SEP 3, 2015
1076. Hazardous Debris and Radioactively Contaminated Lead Acid Batteries	ENCORE	SEP 10, 2015
1077. Mercury Wet Cell Batteries - Debris or Not Debris	ENCORE	SEP 17, 2015
1078. Hazardous Debris and Non-Radioactive Lead Acid Batteries		SEP 24, 2015
1079. Unused Paraformaldehyde - U Listed Hazardous Waste or Not?	ENCORE	OCT 1, 2015
1080. CAS Numbers and the Hazardous Waste "U" and "P" Listings	ENCORE	OCT 8, 2015
1081. Universal Waste One Year Accumulation and Multiple Handlers	ENCORE	OCT 15, 2015
1082. LDR Notifications and F001-F005 Constituents of Concern	ENCORE	OCT 29, 2015
1083. LDR Notifications and F001-F005 Constituents of Concern – Again	ENCORE	NOV 5, 2015
1084. LDR Notifications and F001-F005 Constituents of Concern - One Last Time	ENCORE	NOV 12, 2015
1085. DOT and Terminal Protection of Alkaline Batteries	ENCORE	NOV 19, 2015
1086. Used Oil and Keeping Containers Closed – WAC 173-303 vs. 40 CFR 279		NOV 24, 2015
1087. PCB Weight Determinations	ENCORE	DEC 3, 2015
1088. Satellite Accumulation Requirements and Container Inspections	ENCORE	DEC 10, 2015
1089. 'Twas The Night Before Christmas - The Twenty-Third Annual Edition	ENCORE	DEC 24, 2015
1090. Satellite Accumulation and 85-Gallon Containers	ENCORE	DEC 31, 2015
1091. PCB Date Removed From Service Notations – On the Item or In a Log	ENCORE	JAN 7, 2016
1092. The Date Removed From Service Marking on the PCB Mark	ENCORE	JAN 14, 2016
1093. Generator Weekly Inspection Log Documentation – Federal vs. WA State	ENCORE	JAN 21, 2016
1094. Used Oil and Weekly Inspections	ENCORE	JAN 28, 2016
1095. TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date	ENCORE	FEB 4, 2016
1096. PCB Containers and Multiple Removed From Service Dates	ENCORE	FEB 11, 2016
1097. Generator Inspection Logs and Corrective Action Documentation	ENCORE	FEB 18, 2016
1098. PCB Concentrations and Micrograms per Centimeters Squared (µg/cm ²)		FEB 25, 2016
1099. RCRA Empty Containers and Removing as Much Waste as Possible	ENCORE	MAR 3, 2016

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TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

FROM: PAUL W. MARTIN, RCRA Subject Matter Expert
CHPRC Environmental Protection, Hanford, WA

SUBJECT: RCRA EMPTY CONTAINERS AND REMOVING AS MUCH WASTE AS POSSIBLE

DATE: MARCH 3, 2016

<u>CHPRC Projects</u>	<u>CH PRC - Env. Protection</u>	<u>MSA</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
Richard Austin Roni Ashley Tania Bates Bob Cathel Rene Catlow Richard Clinton Larry Cole John Dent Brian Dixon Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Jeanne Kisielnicki Melvin Lakes Marty Martin Jim McGrogan Stuart Mortensen Anthony Nagel Dean Nester Dave Richards Phil Sheely Connie Simiele Jennie Stults Michael Waters Jeff Widney	Brett Barnes Mitch Boyd Ron Brunke Bill Cox Laura Cusack Lorna Dittmer Rick Engelmann Ted Hopkins Sasa Kosjerina Jim Leary Dale McKenney Jon McKibben Rick Oldham Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Lee Tuott Daniel Turlington Dave Watson Joel Williams	Jerry Cammann Jeff Ehlis Garin Erickson Lori Fritz Panfilo Gonzales Jr. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Jon Perry Thomas Pysto Christina Robison Don Rokkan Lana Strickling Lou Upton	(TBD) <u>DOE RL, ORP, WIPP</u> Mary Beth Burandt Duane Carter Cliff Clark Mike Collins Tony McKarns Ellen Mattlin Greg Sinton Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Greta Davis Jeff DeLine Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Joe Fritts Tom Gilmore Rob Gregory Gene Grohs James Hamilton Andy Hobbs Ryan Johnson Dan Kimball Megan Lerchen Richard Lipinski Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Mandy Pascual Kirk Peterson Jean Quigley	Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Kyle Webster Jeff Westcott Ted Wooley

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TWO MINUTE TRAINING

SUBJECT: RCRA Empty Containers and Removing as Much Waste as Possible

Q: A customer has a 55-gallon drum containing a non-acutely dangerous waste. The customer wants to empty the drum to the point that the residues remaining in the container are no longer subject to the dangerous waste regulations of [WAC 173-303](#) or [40 CFR](#), i.e., RCRA empty. The customer has two options for rendering the drum RCRA empty: 1) using a hand pump to empty the drum to the point that no more than 1-inch of dangerous waste remains in the drum, or 2) inverting the drum to empty it to the point that almost no dangerous waste remains in the drum. Considering these two choices, is the customer obligated to use one method over the other?

A: Per an EPA memo dated November 28, 1984, entitled, "[Empty Container Rule](#)" it states:

"...a 55-gallon drum should be emptied as completely as possible. If pouring from an inverted drum removes more residual than a hand pump does, then pouring is obligatory. Of course, removal must be performed to achieve maximum possible removal, not just to the one-inch level ... in order to produce an empty container according to [40 CFR 261.7\(b\)\(1\)](#)." [WAC 173-303-160(2)(a)]

The memo goes on to state:

"40 CFR §261.7(b)(1)(i), [WAC 173-303-160(2)(a)] sites in part: 'all wastes have been removed that can be removed using the practices commonly employed..., e.g., pouring, pumping, and aspirating...' The August 18, 1982, preamble says that one inch of waste can be left in an empty container only if it remains after performing normal removal operations. Taken together, these citations support the interpretation that all commonly employed emptying methods have to be employed to empty a container. 'Commonly employed' refers to the normal practice of industry, not to what a given person does. Thus, containers that have not been subjected to all commonly employed methods of emptying are still subject to regulation."

Since inverting a container is a commonly employed practice and since inverting will remove all wastes that can be removed, the customer is obligated to use the inversion method for emptying the container as opposed to the hand pump. [Note that the customer could use the hand pump method first followed by inversion since this dual method would render the drum just as empty as the inversion method alone.]

SUMMARY:

- A drum is RCRA empty when all wastes have been removed that can be removed using practices commonly employed to remove wastes from that type of container.
- "Commonly employed" refers to the normal practice of industry and not what a given person does.
- If two methods of emptying are considered as commonly employed, the generator is obligated to use the method that empties the drum as completely as possible.

The November 28, 1984, EPA memo is attached to the e-mail. If you have any questions, please contact me at "Paul_W_Martin@rl.gov" or at (509) 376-6620.

FROM: Paul W. Martin

DATE: 3/3/16

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: RCRA Empty Containers and Removing as Much Waste as Possible

FAXBACK 11048

PPC 9441.1984(34)

EMPTY CONTAINER RULE

DATE: 28 NOV 1984

SUBJECT: Empty Container Rule

FROM: John H. Skinner, Directory, Office of Solid Waste (WH-562)

TO: Karl J. Klepitsch, Jr., Chief, Waste Management Branch

This is in response to your October 24, 1984, memorandum in which you requested a clarification of the Headquarters position on emptying tank cars. Let me reiterate the position Alan Corson took during his conversation with Gary Victorine and relate it to the information included in your memorandum. At that time, Gary did not emphasize that the tank cars had bottom valves.

Alan told Gary that if only top unloading is available, the tank car is empty only if as much has been removed as possible and no more than an inch or no more than 0.3% of the total capacity (weight) remains. However, the Agency expects bottom valves to be used, when present, if they provide maximum removal of waste.

Likewise, a 55-gallon drum should be emptied as completely as possible. If pouring from an inverted drum removes more residual than a hand pump does, then pouring is obligatory. Of course, removal must be performed to achieve maximum possible removal, not just to the one-inch level of 0.03% capacity, in order to produce an empty container according to 40 CFR §261.7(b)(1).

40 CFR §261.7(b)(1)(i) sites in part: "all wastes have been removed that can be removed using the practices commonly employed...,e.g., pouring, pumping, and aspirating..." The August 18, 1982, preamble says that one inch of waste can be left in an empty container only if it remains after performing normal removal operations. Taken together, these citations support the interpretation that all commonly employed emptying methods have to be employed to empty a container. "Commonly employed" refers to the normal practice of industry, not to what a given person does. Thus, containers that have not been subjected to all commonly employed methods of emptying are still subject to regulation.

If you have any further questions on this issue, please do not hesitate to contact Alan Corson of my staff at FTS-382-4770.

cc: Hazardous Waste Branch Chiefs, Regions I-X

FROM: Paul W. Martin

DATE: 3/3/16

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